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**IMPLANTABLE MEDICAL DEVICE FOR
MEASURING MECHANICAL HEART FUNCTION**

ABSTRACT OF THE DISCLOSURE

5 An implantable device for measuring mechanical heart function of selected heart
chambers using a heart contraction detection system that includes a magnetic field sensor. The
system may be used for monitoring signs of acute or chronic cardiac heart failure, to enable
diagnosis of the condition of the heart, to prescribe appropriate therapies, and to assess delivered
pacing therapies. Distance measurements within the heart are made using the magnetic field
10 sensor which is implanted at a sensor site in or on one of the right or left ventricle. A magnet
implanted at a site relative to the other of the left or right heart ventricle is sufficiently spaced at a
distance that fluctuates with expansion and contraction of the ventricles. The magnetic field
sensor provides a sensor output signal having a signal magnitude proportional to the magnetic
field strength of the magnet, and which is indicative of changing cardiac dimensions.

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